

IN BALLYNEETY, COUNTY LIMERICK, THE LUSCIOUS GREEN, ROLLING LANDSCAPE OF THE BEAUTIFUL IRISH COUNTRYSIDE IS THE BACKDROP TO ONE OF THE MOST MODERN BOTTLING PLANTS OF SPRING WATER IN EUROPE: ISHKA IRISH SPRING WATER. THE COMPANY, FOUNDED IN 1978 BY MICHAEL SUTTON SR. THANKS TO A BRILLIANT FAMILY IDEA, IS TODAY A MULTIMILLION-EURO COMPANY MANAGED BY MIKE AND DENIS SUTTON, SONS OF THE FOUNDER. EVERY HOUR THE PLANT, CONSISTING OF FOUR FULLY AUTOMATED LINES BUILT IN PARTNERSHIP WITH SMI, PRODUCES OVER 40,000 BOTTLES OF SPRING WATER, WITH THE UTMOST ATTENTION PAID TO THE CARE AND PRESERVATION OF THE SURROUNDING ENVIRONMENT.



ISHKA

SPRING WATER



➤ **SECTOR: MINERAL WATER**

ISHKA SPRING WATER

Ballyneety, County Limerick, Ireland

➤ **3,600 bph bottling and packaging line for 5L bottles:**

- ECOBLOC® 3-9-3 HC ERGON
- DV 500 divider & SK502T ERGON shrinkwrapper
- APS 1550 ERGON palletizer
- Conveyor belts and various sub-supplies

➤ **16,000 bph end of line for the packaging of 250 ml & 500 ml PET bottles:**

- CSK42 F ERGON & LSK30F shrinkwrappers
- APS 1550 ERGON palletizer and conveyor belt



VIDEO



GEO LOCATION

GROWING TOGETHER: A LONG-STANDING PARTNERSHIP

The collaboration between ISHKA and SMI began about 15 years ago with the purchase of an SK300F shrinkwrapper, currently installed on production Line 1, dedicated to the packaging of 250ml, 500ml, 750ml, 1.5L and 2L bottles. In 2017, on the occasion of the opening of the SMI UK & Ireland branch based in Manchester (United Kingdom), the Sutton brothers once again turned to SMI for the expansion of their plants. During various meetings between Paul McGovern, Director of SMI UK & Ireland, and the management of ISHKA, all the technical and commercial requirements of the new investment were thoroughly analyzed.

Subsequently a series of visits by the Sutton brothers, to the SMI headquarters in Italy, led to the decision to further strengthen the partnership between the two companies for the expansion project of the Ballyneety industrial site.

In particular the new investment of several million euros in 2020, concerned the installation of a new bottling line to increase the production of the 5L format, which is in great market demand.

A high-quality project, the implementation of which was entrusted to SMI; the latter provided a “turnkey” solution, which also involved a new bottle design discarding the traditional square shape and launching a new cylindrical bottle.

An innovative choice that allowed the Irish company to reduce the amount of PET in each bottle, and to align the appearance of the 5 litre container with that of the other elegant ISHKA bottles of smaller capacity.



ECO-SUSTAINABLE SOLUTIONS THAT LOOK TO THE FUTURE



Plastic bottle caps represent 10% of plastic waste found on beaches and the European directive 2019/904 on single-use plastics, includes a provision to regulate their recycling along with the rest of the bottle; for this reason the caps of PET bottles must now remain attached to the containers (tethered cap). Driven by the goal of drastically reducing plastic pollution, and anticipating by three years the coming into force of the EU rules, ISHKA Irish Spring Water started to successfully introduce this type of cap in September 2021, becoming the first, bottled water company in Ireland to implement the directive.



SMI SOLUTIONS FOR THE 5L PRODUCTION LINE

SMI developed the image of the new bottle starting from ISHKA specifications and designed an extremely efficient production line for this particular 5 litre container, which has allowed ISHKA to increase plant capacity by over 50%. The expansion project of the Irish company, made it necessary to upgrade the existing line, this involved replacing the old linear blow moulder with a modern integrated SMI ECOBLOC® system, consisting of a 3-cavity rotary blow moulder, an electronic filler and a capper.





➤ MAIN ADVANTAGES

This system upgrade permitted the installation of a faster and more efficient stretch-blow moulding and filling system, while at the same time maintaining a compact footprint, thanks to the fact that no conveyor belts are necessary between the blow moulder and the filler.

The new project also posed a challenge in secondary packaging, as ISHKA required shrink film pack formats in 2x1 and 3x1 and a large (4x5) tray format to make a half pallet pack. SMI was able to satisfy customer requests without any problems thanks to the versatility of the SK502T ERGON shrinkwrapper, a twin lane machine, suitable for secondary packaging in trays with and without film, equipped with an optional system to also produce packs in film only.

The SK502T ERGON shrinkwrapper is used to create a “super” format consisting of a half-pallet display tray without shrink film. The packaging system groups 20 bottles in a 4x5 pattern, then forms a tray around the bottles, starting from a flat blank; Subsequently, the package thus created, is palletized and sent to supermarkets, ready for display. This secondary packaging solution offers a great economic advantage to ISHKA: instead of the traditional packaging solution, which used two separate machines (one for wrapping in film and one for creating “maxi” trays), SMI proposed a solution consisting of a single automatic packaging machine, capable of performing both processes and, at the same time, occupying less space inside the production line.

The 2x1 and 3x1 pack sizes in film only, are made by the same packaging system, which, after the format change which takes about 1 hour, is able to quickly switch from the production of large sizes in tray only, to small formats in shrink film. The packs in film only, can be equipped with an external handle to make them more manageable and easier to carry.

Naturally, the palletizing system requested by ISHKA also had to have the same flexibility as the rest of the line and for these reasons SMI designed the end-of-line in such a way, as to be able to manage both the small 2x1 and 3x1 multiple packs and the half-pallet tray format, which are automatically placed on a standard UK pallet for warehouse storage.



COMPLETE END OF LINE IN PET AT 16.000 BPH

Bottles worked: 2 different types of 0.25L and 0.5L bottles in PET

Formats worked: Packs in film only (both neutral and printed) in formats of 3x2 - 4x3 - 5x2 - 5x3 and 6x4

- **CSK 42F ERGON PACKAGING MACHINE - Production up to 42 packs / minute**
- **LSK 30 F ERGON PACKAGING MACHINE – PRODUCTION UP TO 30 packs / minute**
- **CONVEYOR BELTS**
- **APS 1550 ERGON PALLETIZER**

Formats worked: packs coming from the packaging machines

Pallets created: europallet 800x1200 / half pallet / standard pallet



In 2018, ISHKA expanded the production of small, format bottles in PET by installing another 16,000 bph production line for 250ml and 500ml formats at the Ballyneety plant. Thanks to the validity of the partnership with SMI, consolidated over the years, the Irish company once again relied on the “made in Italy” technology for their new plant, focusing on a “turnkey” solution for end-of-line packaging, from the existing labeling machine up to the new palletizing system. By combining a CSK42F ERGON twin lane shrink wrapper and an LSK30F ERGON shrinkwrapper to re-pack in film only, SMI provided ISHKA with the ideal solution to easily create “pack-in-pack” packages for large distribution. An example is represented by the 3x2, 500ml bottle in film only, which is formed initially in twin lane on the CSK42F ERGON packaging machine and then grouped into 4 packs, on



the second packer the LSK30, from which the “ pack-in-pack ”is ready to be palletized and efficiently distributed to the network of supermarkets, hypermarkets and stores served by the Irish company.

The SMI APS 1550 ERGON palletizing system offers a flexible quick-change solution to create a wide range of PET bottle packs in both 250ml and 500ml. The machine manages half pallets, euro-pallets and UK pallets and has an optional system that automatically loads the half pallets, on standard pallets for storage in the warehouse. The new APS 1550 ERGON palletizer is able to manage more than 20 pack formats and multiple palletization schemes, in a simple and fast way, thanks to the innovative POSYC® automation and control interface, dedicated to monitoring the operation of the line and controlling the product flow and the speed of the conveyor belts.



A CHAT WITH THE CUSTOMER

→ INTERVIEW WITH MIKE AND DENIS SUTTON Owners of Ishka Irish Spring Water



Q: When and why did ISHKA start bottling water?

A: ISHKA Irish Spring Water is a family business founded in 1978 by our father Michael. Our mother, who was a great Irish speaker, invented the phonics for the trademark.

The company, located in Ballyneety in County Limerick, occupies a production site of 11-acres and is one of the most modern facilities in Europe, where product innovation, production efficiency and sustainable development have been the order of the day since the beginning. In 2012, after major investments to make

the site safe, we started producing bottles in PET on site, a goal that our father had always dreamed of, however, he unfortunately passed away only a few months before the start of the new business. About 60% of the water bottled in our factory, is destined for various private labels distributed in the main Irish supermarkets, while the remaining 40% concerns bottles marketed under the ISHKA brand.

Q: In general, what position does ISHKA water hold compared to the others available on the market?

A: ISHKA is known for being “Ireland’s freshest spring water”, as it is drawn from aquifers 200 meters underground and naturally filtered through the pristine, limestone bedrock of Ballyneety (hence the distinctive taste and product refreshment).

ISHKA was the first Irish spring water company on the market to introduce a 100% recycled PET (rPET) bottle and the first to use “tethered” caps anchored to the bottle, three years before the EU Directive, that made them mandatory, came into force.

Q: Is this innovation continual?

A: Naturally! Innovation is a constant element of our business. ISHKA is planning a new €11 million investment, to install a new high-speed rPET bottling line, capable of producing up to 36,000 bottles per hour, by early 2023. We will also install a new glass line for the catering and hospitality sector. The presence of a brand new kitchen, will also allow us to add flavorings and develop a new range of mixers and flavored drinks..

Q: What are the main factors that convinced you to invest in a new plant supplied by SMI?

A: SMI offered us a unique solution for filling, transporting product on conveyor belts, secondary packaging and palletizing, with the consequent optimization of management costs



and time for format changes. The line designed by our Italian partner, guarantees maximum production flexibility. Furthermore, the presence of a local SMI branch that assists us quickly and efficiently, is of great importance to us.

Q: How important are sustainability and environmental protection to ISHKA, and to your customers?

A: As a company we are determined to do everything possible to guide consumer behaviour towards the necessary change, to solve the global waste problem and to safeguard marine life. Many of the innovative activities at ISHKA Irish Spring Water are about finding optimal solutions for the packaging of our spring water. We chose rPET because it is currently the packaging option that is the most eco-friendly. Furthermore, we are constantly striving to minimize the environmental impact of our business through a series of initiatives, including the use of recyclable plastics such as rPET and light BPA-free plastics and reducing the weight of the containers. In fact, all the bottles that leave our production plants are 100% recyclable. Further help in protecting the environment, comes from the fact that we produce rPET bottles on site, thus eliminating the need to transport them by road to our factory. Our company is also part of REPAK, Ireland's leading environmental non-profit organization for the recycling and sustainability of packaging waste. As a member, we help fund projects for the development of fully recyclable household containers and for the creation of national recycling centers.

Q: How do you see the future of the bottled water industry?

A: The demand for bottled spring water in Ireland, is estimated to continue to grow in the coming years. Customers are increasingly interested in "premium" products, in knowing how they are produced and what they contain. At ISHKA we have great respect for the territory that hosts us and for the water it provides; for this reason we undertake all possible initiatives to ensure the purity of our source and the surrounding environment. Every investment aimed at protecting the eco-system in which we operate, is a guarantee to maintain the quality of our products today, tomorrow and forever.



The beginning of the partnership between ISHKA and SMI began with Line 1 of the Ballyneety plant, the 16,000 bph PET line, currently dedicated to the production of 250ml, 500ml, 750ml, 1.5L and 2L bottles, inside which the SK300F shrinkwrapper has been in operation since 2009. Thanks to the satisfactory results obtained with this machine, in 2017 the Irish company again entrusted SMI, with the project to expand and update its production lines. To achieve this, the management of ISHKA and Paul McGovern, director of SMI UK & Ireland, met several times to evaluate which stretch-blow mould, filling and packaging solution would best meet the new requirements. In the end, the owners of the Irish company,

Mike and Denis Sutton, decided to invest in a new 16,000 bottles / hour, SMI SR 8 rotary stretch-blow moulder, to increase the production capacity of ISHKA's first line, which has been in operation for many years. The installation was a huge challenge for the technical teams of SMI and ISHKA, because the new blow molding system had to be placed within the existing production line, minimizing the downtime of the water bottling and packaging activity. The careful planning of the entire operation, the close collaboration between the two companies and the timely execution of the various steps, made it possible to successfully complete the upgrade of the plant, further consolidating the relationship of trust between ISHKA and the local branch of the SMI Group.

WHERE IT ALL BEGAN...



VAST GREEN SPACES AND STUNNING LANDSCAPES: WELCOME TO IRELAND

Ireland has always been considered, in the collective imagination, a mystical place, to experience it in depth, Limerick is the ideal destination. The third largest city on the island, Limerick is located close to the mouth of the River Shannon, which, together with the rocky land of the Burren to the north and the verdant countryside of the Ring of Kerry to the south, offers surprising landscapes to those who visit it. The city consists of three historic districts: King's Island (the English city), Irishtown (the Irish city) and Newtown Pery (the most recent part, dating back to 1769). County Limerick, in the south of Ireland, is one of the most interesting counties to discover; in fact, it is an area rich in natural and historical wonders, that leave travellers speechless. Among large green spaces and incredible landscapes there is no shortage of cultural beauty such as monasteries and castles, of which this region is particularly rich.



LIMERICK: BETWEEN ANCIENT AND MODERN

The history of County Limerick is very old and also very intense. The city was founded in the ninth century by the Vikings, expert sailors who soon understood the strategic position of the territory, above all thanks to the presence of the River Shannon. Before their arrival, this patch of land seemed uninhabited, so much so that the name of the city itself means, in fact, "desert swamp". Limerick moves between ancient and modern with incredible ease. It is quite easy to catch glimpses of past centuries and then suddenly see ultramodern neighborhoods, walk through the medieval quarter and immediately find yourself at the "Milk Market", a large covered market that has been selling fruit, vegetables, meat, dairy

products, handicrafts and bakery products since 1852. This Irish city is also home to the much-loved Munster rugby team. The famous Irish Coffee originated in Limerick. According to tradition, the preparation of the drink is down to Joe Sheridan, chef of the O'Regan restaurant at Foynes airport. In 1943 some passengers arrived at the restaurant bar in the middle of the night, tired and annoyed by the cancellation of their flight due to bad weather. Joe Sheridan came up with the idea of serving them something sturdy that could reassure and "warm" the passengers. He brewed some very strong coffee, added sugar and whiskey, topped with cream. When the passengers asked him if it was Brazilian coffee, the amused chef replied: "No, it's Irish coffee!"



➤ KING JOHN'S CASTLE

Standing on the River Shannon it is the most emblematic monument in Limerick. Only the external walls and fortified towers of the castle remain, which have become tourist attractions. The first permanent bastion was thanks to the Viking king Thormodr Helgason, who built a base here around the year 920. It is a fascinating place, full of history. Located in the heart of Limerick's medieval quarter, King John's Castle, which was built around 1200 by direct order of King John of England, brings to life over 800 years of dramatic local history within its mighty walls. A visit to this amazing testament to Ireland's past is a must when visiting the city of Limerick. The castle itself has a turbulent history, dating back to the Viking era and has undergone numerous sieges, battles and triumphs throughout its long history.



➤ ST. MARY CATHEDRAL

The building of St. Mary's Cathedral, dedicated to the Virgin Mary, began in 1168 and has undergone many changes over time, becoming a superb testimony of medieval Romanesque and Gothic architecture. The imposing building is located in the historic center of Limerick and is the only structure in the city, that has been used continuously for over 850 years. The cathedral is adorned inside with sculptures depicting fantastic animals and grotesque characters, representing the struggle between good and evil. The massive bell tower, built in the 14th century, houses the famous bells of Santa Maria, which announce news and events to the city and on New Year's Eve they welcome in the New Year with their mighty tolls.



THE CLIFFS OF MOHER

One of the most evocative and fascinating places in Ireland, is certainly represented by the magnificent Cliffs of Moher, located near the village of Doolin on the west coast of Clare. The Cliffs of Moher (Aillte an Mhothair, which means "cliffs of ruin" in Irish Gaelic) are 8 kilometers long and reach a maximum height of 214 meters above sea level. Walking along the cliff tops overlooking the sea is a unique sensation: it seems as though you are on the edge of the world and the panorama reaches poetic levels when the colors of the sunset light up the sky and peace is interrupted only by the flight of birds, by the sound of the wind and the waves that crash on the rocks. Such a scenic setting could not escape the film industry, in fact many famous films have been shot here such as "Harry Potter and the Half Blood Prince", "The Fantastic Story" and "Ryan's Daughter". The formation of the Cliffs of Moher dates back to about 320 million years ago. The tourist area allows you to admire beautiful views and visit places such as the O'Brien tower (1835), built for tourists of the time as a privileged observation point on the cliffs. The view of the Aran Islands is almost always guaranteed unless visibility is compromised by fog.



